



# Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE / PUBLIC HEALTH SERVICE / HEALTH SERVICES AND MENTAL HEALTH ADMINISTRATION

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## EPIDEMIOLOGIC NOTES AND REPORTS

ADENOVIRUS 7a INFECTION IN CHILDREN WITH  
SEVERE RESPIRATORY DISEASE - New York City

On Feb. 15, 1970, a 15-month-old boy was admitted to a hospital in New York City with a diagnosis of bronchiolitis. His condition worsened, and he died 5 days later. At postmortem examination many air-filled blebs were seen throughout the lung parenchyma, and on microscopic examination interstitial pneumonitis was identified. In addition, adenovirus 7a was isolated from a pharyngeal swab taken on February 18.

In the meantime on February 17, his twin brother had been hospitalized, also with bronchiolitis. Adenovirus 7a was isolated from a pharyngeal swab taken on him on February 19. Since that time, this child has had a prolonged course of lower respiratory disease complicated by a Pseu-

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domonas bacteremia, and at present, he remains ill and has signs of permanent pulmonary damage.

These children lived with their mother, grandmother, and 4-year-old sibling. The mother reported having a respiratory illness during February at the time the twins had become ill. The other two household members had not been ill.

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

| DISEASE   | 19th WEEK ENDED |                 | MEDIAN<br>1965 - 1969 | CUMULATIVE, FIRST 19 WEEKS |        |                       |
|---|-----------------|-----------------|-----------------------|----------------------------|--------|-----------------------|
|   | May 16,<br>1970 | May 10,<br>1969 |                       | 1970                       | 1969   | MEDIAN<br>1965 - 1969 |
| Aseptic meningitis . . . . .                          | 30              | 23              | 26                    | 521                        | 538    | 538                   |
| Brucellosis . . . . .                                 | 4               | 4               | 6                     | 62                         | 49     | 76                    |
| Diphtheria . . . . .                                  | 36              | -               | 1                     | 156                        | 49     | 53                    |
| Encephalitis, primary:                                |                 |                 |                       |                            |        |                       |
| Arthropod-borne & unspecified . . . . .               | 23              | 17              | 26                    | 381                        | 371    | 460                   |
| Encephalitis, post-infectious . . . . .               | 4               | 9               | 18                    | 157                        | 104    | 296                   |
| Hepatitis, serum . . . . .                            | 123             | 97              | 814                   | 2,491                      | 1,919  | 15,713                |
| Hepatitis, infectious . . . . .                       | 1,096           | 933             | 25                    | 20,677                     | 17,515 | 721                   |
| Malaria . . . . .                                     | 84              | 103             | 25                    | 1,273                      | 938    | 721                   |
| Measles (rubeola) . . . . .                           | 1,927           | 914             | 2,227                 | 26,071                     | 12,542 | 44,387                |
| Meningococcal infections, total . . . . .             | 46              | 72              | 72                    | 1,257                      | 1,640  | 1,611                 |
| Civilian . . . . .                                    | 46              | 61              | 61                    | 1,128                      | 1,484  | 1,464                 |
| Military . . . . .                                    | -               | 11              | 5                     | 129                        | 156    | 147                   |
| Mumps . . . . .                                       | 2,853           | 2,548           | -                     | 52,263                     | 46,860 | -                     |
| Poliomyelitis, total . . . . .                        | -               | -               | -                     | 1                          | 1      | 7                     |
| Paralytic . . . . .                                   | -               | -               | -                     | 1                          | 1      | 5                     |
| Rubella (German measles) . . . . .                    | 2,898           | 3,115           | -                     | 36,147                     | 29,488 | -                     |
| Tetanus . . . . .                                     | -               | 5               | 4                     | 31                         | 42     | 42                    |
| Tularemia . . . . .                                   | -               | 2               | 5                     | 33                         | 33     | 55                    |
| Typhoid fever . . . . .                               | 1               | 14              | 7                     | 80                         | 98     | 104                   |
| Typhus, tick-borne (Rky. Mt. spotted fever) . . . . . | 10              | 11              | 3                     | 21                         | 21     | 16                    |
| Rabies in animals . . . . .                           | 39              | 79              | 80                    | 1,229                      | 1,479  | 1,685                 |

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

|  | Cum. |  | Cum. |
|--|------|--|------|
| Anthrax: . . . . .                         | 1    | Psittacosis: . . . . .                   | 13   |
| Botulism: . . . . .                        | 1    | Rabies in Man: . . . . .                 | -    |
| Leprosy: La.-1, Minn.-1, Texas-1 . . . . . | 41   | Rubella congenital syndrome: . . . . .   | 29   |
| Leptospirosis: . . . . .                   | 11   | Trichinosis: Hawaii-1, Tenn.-1 . . . . . | 40   |
| Plague: . . . . .                          | -    | Typhus, murine: Texas-3 . . . . .        | 5    |

## ADENOVIRUS 7a INFECTION - (Continued from front page)

On February 25, two pediatric residents, an anesthesiologist, and a nurse, all of whom had had contact with one or the other of the two patients, developed a conjunctivitis and pharyngitis. Epidemic keratoconjunctivitis was diagnosed clinically by an ophthalmologist, and cultures of eye swabs on the two pediatricians taken on February 25 were positive for adenovirus 7a.

Further serologic and epidemiologic studies on the family and hospital contacts of these twins are in progress. (Reported by Alfred Kogon, M.D., Associate Professor of Community and Preventive Medicine, and Hospital Epidemiologist, Frank Galioto, M.D., Pediatric Resident, Susan G. Gordon, M.D., Associate Professor of Pediatrics, and Theodore Sall, Ph.D., Assistant Professor of Micro-

biology, Metropolitan Hospital, New York Medical College; and Stephen Millian, Ph.D., Chief of Virology, and Vincent F. Guinee, M.D., Principal Epidemiologist, Bureau of Infectious Disease Control, New York City Department of Health.)

## Editorial Comment:

Although adenovirus type 7a has been primarily associated with epidemics in military populations, well-documented civilian outbreaks have occurred, resulting occasionally in severe and fatal cases, particularly in infants and young children (1).

## Reference

- (1) van der Veen, J.: The role of adenoviruses in respiratory disease. *Amer Rev Resp Dis* 88: Supp (Sept.) 167-180, 1964.

## INTERNATIONAL NOTES

## AN OUTBREAK OF INFECTIOUS HEPATITIS - Buenos Aires, Argentina

Between June 9 and Sept. 17, 1969, a total of 26 cases of infectious hepatitis (Figure 1) occurred in students and faculty at a predominantly boys' school (grades kindergarten through 8; enrollment 267) in Buenos Aires, Argentina. In general, the illnesses had a sudden onset and were characterized by fever, weakness, nausea, abdominal cramping, dark urine, and jaundice. Twenty-five patients were pupils, ages 5 to 12 years, and the other was a 10-year-old physical education instructor. Cases occurred evenly from kindergarten to grade 7 with no cases in grade 8. All patients were males except for one female, who was one of five girls in the kindergarten and the sister of one of the ill boys. She became ill 2 weeks after her brother. Two other pupils from separate families had onset of illness following illness in their brothers who also attended the school. During this outbreak five other cases occurred in young boys who lived in the area but who had no apparent contact with the ill pupils. No cases were reported in 1969 from five other nearby schools.

The slow spread of cases over the first 2-1/2 months

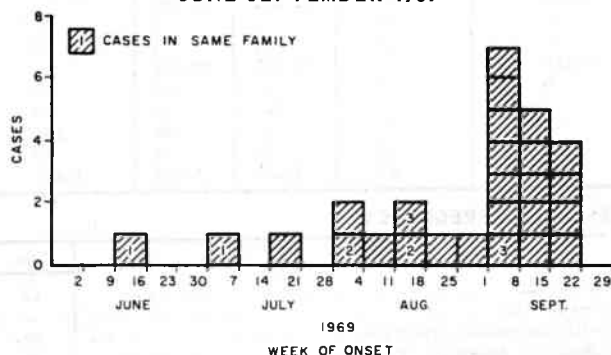
of the outbreak suggested person-to-person transmission of hepatitis while the clustering of nearly two-thirds of the cases in September seemed compatible either with a common source exposure or an accumulation of secondary cases resulting from contact with an earlier case(s). Possibilities as to spread by a common source were investigated.

All pupils at the school had been vaccinated (DPT, BCG, and smallpox) prior to enrollment and most within the last 6 months. This was eliminated as the possible source of infection because the vaccinations had been obtained on an individual basis. Transportation of the pupils to school could not be incriminated as a means of spread of infection since most pupils walked to school, and no school buses were used.

Food was not strongly considered as the possible common source for several reasons: (1) 70 of the 267 pupils routinely had lunch at the school dining room, and 16 of the ill pupils regularly ate lunch at home; (2) the school kitchen was inspected and found to be in satisfactory condition, and no kitchen personnel had been ill; and (3) although sugar-coated or jam-stuffed small bakery loaves obtained locally were distributed at recreation time, no other hepatitis illness had been recognized in the area of distribution of these products.

Water for washing and drinking was derived from the Buenos Aires municipal supply and was collected in two large covered tanks which supplied the commodes and six faucets in a large basin. The faucets in the basin were used for drinking and handwashing and most children while using the basin, placed their hands on its edge. Mops, buckets, and other cleaning equipment used for commodes, floors, etc., were also washed in this basin thereby providing the possibility for contamination of its surface and subsequent transmission of infection to school children. Illness in the physical education instructor could possibly be explained by the fact that he commonly shared his whistle with the school children for use during their games.

Figure 1  
CASES OF INFECTIOUS HEPATITIS AT A SCHOOL  
BY WEEK OF ONSET - BUENOS AIRES, ARGENTINA  
JUNE-SEPTEMBER 1969



(Reported by Dr. Hawviller, Dr. Michref, Dr. Barboza, and Dr. Carlos A. Urquijo, Chief of the Department of Epidemiology, School of Public Health, University of Buenos

Aires, and Dr. Carlos Alvarez Herrera, Chief, Health Care Department, Ministry of Social Welfare, Argentina.)

### POLIOMYELITIS - Worldwide

For the world, the total numbers of poliomyelitis cases for 1966, 1967, 1968, and 1969\* were 12,576, 8,040, 11,079, and 6,507 cases, respectively (Table 1).

In the European countries, the annual incidence for each of the years 1966 to 1968 was between 1/12 and 1/34 of the annual average for the period 1951-1955, years before poliomyelitis vaccines became available and widely used. Further decreases would probably have occurred also in 1968 and 1969 except that in these years large outbreaks occurred in Poland and Spain.

In the United States of America, Canada, Australia, and New Zealand, the incidence has continued to fall sharply in recent years from that of prevaccine years. Compared with 1951-1955, the reduction in 1966 was 400-fold; in 1968, 700-fold; and in 1969 will be approximately 1,000-fold if the trend of the first three quarters continues for the final reports of the fourth quarter.

In Africa, 34 countries report cases of poliomyelitis to the World Health Organization. In 24 of these the average annual number of cases in 1961-1965 increased compared with 1951-1955. Little change occurred in the annual number of cases reported during the period 1966 to 1969. In 1969 a substantial increase occurred during the first three quarters of the year, with five countries (Democratic Republic of the Congo, People's Republic of the Congo, Kenya, South Africa, and Mali) accounting for 79.1 percent of the total number of reported cases.

In Central and South America, the annual number of reported cases during the period 1966-1968 showed a reduction of approximately 50 percent from the annual average during the prevaccine period 1951-1955. In nine of the 20 reporting countries, however, the annual average increased

in the period 1961-1965 compared with 1951-1955. Six countries in 1969 had increases above the 1968 annual number, despite the fact that at present final totals are available only for three quarters of 1969. These increases reflect substantial outbreaks in Ecuador, Nicaragua, and Costa Rica.

The information for Asia includes reports from 17 countries, the population of which represents only a small proportion of the total Asian population. Twelve of these 17 countries showed increases in the annual averages between 1951-1955 and 1961-1965. The preliminary figures for 1969 showed no increases in any country compared with 1968.

Altogether, of the 71 tropical and semitropical countries in Africa, Central and South America, and Asia, 45 showed increases in their annual average number of cases between the period 1951-1955 and 1961-1965. The increases were, in general, 3-fold between the two periods. In the 3-year period 1966-1968, 40 of the 71 countries reported 100 or more cases per year and 19 reported 400 or more. In Europe, North America, Australia, New Zealand, and a few other countries including the Union of Soviet Socialist Republics, the disease has decreased to insignificant proportions. In Africa, Central and South America, and Asia, the frequency of outbreaks, however, is increasing. Such outbreaks are not yet as large as those common to Europe and North America prior to widespread vaccine use. Poliovirus type 1 is still responsible for the majority of cases in these countries.

Source: World Health Organization Weekly Epidemiological Record, 45(17):189-194, Apr. 24, 1970.

\*Preliminary data.

Table 1  
Poliomyelitis Cases Reported to the World Health Organization by Five Major Regions of the World  
1951-1969

| Region                        | Average Number of Cases |           | 1966   | 1967  | 1968   | 1969* |
|-------------------------------|-------------------------|-----------|--------|-------|--------|-------|
|                               | 1951-1955               | 1961-1965 |        |       |        |       |
| I. Europe                     | 28,359                  | 6,665     | 828    | 824   | 1,020  | 475   |
| United States of America      |                         |           |        |       |        |       |
| Canada                        |                         |           |        |       |        |       |
| II. Australia                 | 44,378                  | 852       | 113    | 49    | 64     | 21    |
| New Zealand                   |                         |           |        |       |        |       |
| III. Africa                   | 3,660                   | 3,932     | 3,983  | 2,345 | 3,064  | 3,726 |
| IV. Central and South America | 4,639                   | 3,903     | 2,290  | 3,351 | 2,588  | 1,527 |
| V. Asia                       | 4,718                   | 4,647     | 5,362  | 1,471 | 4,343  | 758   |
| Total                         | ---                     | ---       | 12,576 | 8,040 | 11,079 | 6,507 |

\*Preliminary data.

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED  
MAY 16, 1970 AND MAY 10, 1969 (19th WEEK)

| AREA                                       | ASEPTIC<br>MENIN-<br>GITIS | BRUCEL-<br>LOSIS | DIPH-<br>THERIA | ENCEPHALITIS                     |        |                      | HEPATITIS |            |          | MALARIA |              |
|--|----------------------------|------------------|-----------------|----------------------------------|--------|----------------------|-----------|------------|----------|---------|--------------|
|  |                            |                  |                 | Primary including<br>unsp. cases |        | Post In-<br>fectious | Serum     | Infectious |          | 1970    | Cum.<br>1970 |
|  |                            |                  |                 | 1970                             | 1969   | 1970                 |           | 1970       | 1969     |         |              |
| UNITED STATES.....                         | 30                         | 4                | 36              | 23                               | 17     | 4                    | 123       | 1,096      | 933      | 84      | 1,273        |
| NEW ENGLAND.....                           | 5                          | -                | -               | 2                                | 1      | -                    | 7         | 41         | 89       | -       | 38           |
| Maine.*.....                               | -                          | -                | -               | -                                | -      | -                    | -         | 9          | 6        | -       | 3            |
| New Hampshire.*.....                       | -                          | -                | -               | -                                | -      | -                    | -         | 3          | 10       | -       | -            |
| Vermont.....                               | -                          | -                | -               | -                                | -      | -                    | -         | 5          | 1        | -       | 3            |
| Massachusetts.....                         | 4                          | -                | -               | 2                                | -      | -                    | 4         | -          | 25       | -       | 20           |
| Rhode Island.....                          | 1                          | -                | -               | -                                | -      | -                    | -         | 16         | 33       | -       | 5            |
| Connecticut.....                           | -                          | -                | -               | -                                | 1      | -                    | 3         | 8          | 14       | -       | 7            |
| MIDDLE ATLANTIC.....                       | 3                          | -                | -               | 4                                | 2      | 1                    | 39        | 108        | 171      | 2       | 136          |
| New York City.....                         | 2                          | -                | -               | 4                                | 2      | -                    | 23        | 41         | 65       | -       | 25           |
| New York, Up-State...<br>New Jersey.*..... | -<br>1                     | -<br>-           | -<br>-          | -<br>-                           | -<br>- | 1<br>-               | 6<br>10   | 30<br>37   | 22<br>47 | 2<br>-  | 41<br>37     |
| Pennsylvania.....                          | ---                        | ---              | ---             | ---                              | ---    | ---                  | ---       | ---        | 37       | ---     | 35           |
| EAST NORTH CENTRAL.....                    | 4                          | -                | -               | 9                                | 1      | -                    | 17        | 187        | 116      | 5       | 61           |
| Ohio.....                                  | 1                          | -                | -               | 4                                | -      | -                    | 2         | 46         | 28       | 1       | 17           |
| Indiana.....                               | 1                          | -                | -               | -                                | -      | -                    | -         | 28         | 10       | 1       | 5            |
| Illinois.....                              | 1                          | -                | -               | 1                                | -      | -                    | 3         | 28         | 17       | -       | 8            |
| Michigan.....                              | 1                          | -                | -               | 4                                | 1      | -                    | 12        | 76         | 56       | 3       | 31           |
| Wisconsin.....                             | -                          | -                | -               | -                                | -      | -                    | -         | 9          | 5        | -       | -            |
| WEST NORTH CENTRAL.....                    | -                          | 1                | -               | -                                | -      | -                    | 4         | 53         | 35       | 6       | 89           |
| Minnesota.....                             | -                          | -                | -               | -                                | -      | -                    | -         | 15         | 9        | -       | 1            |
| Iowa.....                                  | -                          | 1                | -               | -                                | -      | -                    | -         | 6          | 3        | -       | 7            |
| Missouri.....                              | -                          | -                | -               | -                                | -      | -                    | 2         | 14         | 16       | -       | 14           |
| North Dakota.....                          | -                          | -                | -               | -                                | -      | -                    | -         | -          | 1        | -       | 1            |
| South Dakota.....                          | -                          | -                | -               | -                                | -      | -                    | -         | 1          | 1        | 2       | 2            |
| Nebraska.....                              | -                          | -                | -               | -                                | -      | -                    | -         | 11         | 2        | -       | 1            |
| Kansas.....                                | -                          | -                | -               | -                                | -      | -                    | 2         | 6          | 3        | 4       | 63           |
| SOUTH ATLANTIC.....                        | 5                          | -                | -               | 2                                | 5      | 1                    | 7         | 153        | 89       | 8       | 217          |
| Delaware.....                              | -                          | -                | -               | -                                | -      | -                    | -         | 1          | -        | -       | 1            |
| Maryland.....                              | -                          | -                | -               | 2                                | 2      | 1                    | 3         | 17         | 19       | 2       | 24           |
| Dist. of Columbia....                      | -                          | -                | -               | -                                | -      | -                    | 2         | -          | -        | -       | 2            |
| Virginia.....                              | -                          | -                | -               | -                                | -      | -                    | -         | 21         | 4        | -       | 19           |
| West Virginia.....                         | -                          | -                | -               | -                                | 1      | -                    | -         | 4          | 2        | 2       | 3            |
| North Carolina.....                        | -                          | -                | -               | -                                | -      | -                    | -         | 31         | 9        | 2       | 93           |
| South Carolina.....                        | 1                          | -                | -               | -                                | 2      | -                    | -         | 12         | 6        | 1       | 18           |
| Georgia.....                               | -                          | -                | -               | -                                | -      | -                    | -         | 12         | 31       | -       | 39           |
| Florida.....                               | 4                          | -                | -               | -                                | -      | -                    | 2         | 55         | 18       | 1       | 18           |
| EAST SOUTH CENTRAL.....                    | 1                          | -                | -               | 2                                | 1      | -                    | 1         | 71         | 64       | 2       | 101          |
| Kentucky.....                              | -                          | -                | -               | -                                | -      | -                    | -         | 19         | 26       | -       | 85           |
| Tennessee.....                             | -                          | -                | -               | 2                                | 1      | -                    | -         | 34         | 25       | -       | -            |
| Alabama.....                               | 1                          | -                | -               | -                                | -      | -                    | 1         | 15         | 4        | -       | 11           |
| Mississippi.....                           | -                          | -                | -               | -                                | -      | -                    | -         | 3          | 9        | 2       | 5            |
| WEST SOUTH CENTRAL.....                    | -                          | -                | 29              | 1                                | 3      | 1                    | 5         | 135        | 67       | 18      | 257          |
| Arkansas.....                              | -                          | -                | -               | -                                | 1      | -                    | -         | 10         | -        | -       | 4            |
| Louisiana.....                             | -                          | -                | -               | 1                                | 2      | 1                    | 1         | 18         | 12       | 2       | 17           |
| Oklahoma.....                              | -                          | -                | -               | -                                | -      | -                    | -         | 5          | 5        | 6       | 34           |
| Texas.....                                 | -                          | -                | 29              | -                                | -      | -                    | 4         | 102        | 50       | 10      | 202          |
| MOUNTAIN.....                              | -                          | -                | 4               | -                                | 1      | -                    | 2         | 68         | 58       | 1       | 107          |
| Montana.....                               | -                          | -                | -               | -                                | -      | -                    | -         | 3          | 2        | -       | 4            |
| Idaho.....                                 | -                          | -                | -               | -                                | -      | -                    | -         | 1          | 3        | -       | 2            |
| Wyoming.....                               | -                          | -                | -               | -                                | -      | -                    | -         | 2          | -        | -       | -            |
| Colorado.....                              | -                          | -                | -               | -                                | -      | -                    | 1         | 37         | 17       | 1       | 93           |
| New Mexico.....                            | -                          | -                | -               | -                                | 1      | -                    | -         | 6          | 7        | -       | 3            |
| Arizona.*.....                             | -                          | -                | 4               | -                                | -      | -                    | -         | 16         | 11       | -       | 3            |
| Utah.....                                  | -                          | -                | -               | -                                | -      | -                    | 1         | 3          | 4        | -       | 2            |
| Nevada.....                                | -                          | -                | -               | -                                | -      | -                    | -         | -          | 14       | -       | -            |
| PACIFIC.....                               | 12                         | 3                | 3               | 3                                | 3      | 1                    | 41        | 280        | 244      | 42      | 265          |
| Washington.....                            | -                          | -                | 2               | 1                                | -      | -                    | 1         | 29         | 35       | -       | 12           |
| Oregon.....                                | 1                          | -                | 1               | -                                | -      | -                    | 1         | 17         | 11       | 1       | 12           |
| California.....                            | 10                         | 3                | -               | 2                                | 3      | 1                    | 39        | 225        | 195      | 16      | 173          |
| Alaska.....                                | -                          | -                | -               | -                                | -      | -                    | -         | 3          | -        | -       | -            |
| Hawaii.....                                | 1                          | -                | -               | -                                | -      | -                    | -         | 6          | 3        | 25      | 68           |
| Puerto Rico *.....                         | -                          | -                | -               | -                                | -      | -                    | 3         | 26         | 33       | -       | -            |
| Virgin Islands.....                        | -                          | -                | -               | -                                | -      | -                    | -         | -          | -        | -       | -            |

\*Delayed Reports: Encephalitis, primary: New Hampshire 1

Hepatitis, serum: Maine Delete 1, Louisiana Delete 1, Arizona 1, Puerto Rico 1

Hepatitis, infectious: New Jersey Delete 1, Puerto Rico 7

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

MAY 16, 1970 AND MAY 10, 1969 (19th WEEK) - CONTINUED

| AREA                    | MEASLES (Rubeola) |            |        | MENINGOCOCCAL INFECTIONS, TOTAL |            |       | MUMPS |              | POLIOMYELITIS |           |              |
|-------------------------|-------------------|------------|--------|---------------------------------|------------|-------|-------|--------------|---------------|-----------|--------------|
|                         | 1970              | Cumulative |        | 1970                            | Cumulative |       | 1970  | Cum.<br>1970 | Total<br>1970 | Paralytic |              |
|                         |                   | 1970       | 1969   |                                 | 1970       | 1969  |       |              |               | 1970      | Cum.<br>1970 |
| UNITED STATES.....      | 1,927             | 26,071     | 12,542 | 46                              | 1,257      | 1,640 | 2,853 | 52,263       | -             | -         | 1            |
| NEW ENGLAND.....        | 62                | 541        | 641    | 9                               | 57         | 49    | 274   | 6,503        | -             | -         | -            |
| Maine.....              | 6                 | 18         | 4      | -                               | 1          | 4     | 12    | 580          | -             | -         | -            |
| New Hampshire.....      | 2                 | 17         | 200    | -                               | 5          | 1     | 2     | 219          | -             | -         | -            |
| Vermont.....            | -                 | 2          | 2      | -                               | 5          | -     | 6     | 523          | -             | -         | -            |
| Massachusetts.....      | 44                | 426        | 92     | 8                               | 26         | 22    | 101   | 2,133        | -             | -         | -            |
| Rhode Island.....       | 8                 | 23         | 17     | -                               | 3          | 4     | -     | 801          | -             | -         | -            |
| Connecticut.....        | 2                 | 55         | 326    | 1                               | 17         | 18    | 153   | 2,247        | -             | -         | -            |
| MIDDLE ATLANTIC.....    | 114               | 3,176      | 4,477  | 9                               | 220        | 245   | 129   | 5,166        | -             | -         | -            |
| New York City.....      | 31                | 566        | 3,095  | 5                               | 55         | 44    | 87    | 1,689        | -             | -         | -            |
| New York, Up-State...   | 8                 | 126        | 397    | 1                               | 43         | 41    | NN    | NN           | -             | -         | -            |
| New Jersey.....         | 75                | 1,320      | 517    | 3                               | 83         | 104   | 42    | 1,543        | -             | -         | -            |
| Pennsylvania.....       | ---               | 1,164      | 468    | ---                             | 39         | 56    | ---   | 1,934        | ---           | ---       | -            |
| EAST NORTH CENTRAL..... | 469               | 6,023      | 1,270  | 5                               | 145        | 208   | 803   | 13,348       | -             | -         | -            |
| Ohio.....               | 222               | 2,413      | 207    | 3                               | 65         | 73    | 184   | 2,157        | -             | -         | -            |
| Indiana.....            | 4                 | 192        | 365    | 1                               | 17         | 26    | 55    | 1,276        | -             | -         | -            |
| Illinois.....           | 101               | 2,129      | 210    | -                               | 31         | 35    | 62    | 1,203        | -             | -         | -            |
| Michigan.....           | 102               | 751        | 122    | 1                               | 28         | 60    | 232   | 3,213        | -             | -         | -            |
| Wisconsin.....          | 40                | 538        | 366    | -                               | 4          | 14    | 270   | 5,499        | -             | -         | -            |
| WEST NORTH CENTRAL..... | 100               | 2,243      | 378    | 2                               | 62         | 89    | 185   | 3,009        | -             | -         | -            |
| Minnesota.....          | 4                 | 30         | 1      | -                               | 7          | 16    | 8     | 290          | -             | -         | -            |
| Iowa.....               | 21                | 101        | 241    | 1                               | 8          | 10    | 152   | 1,969        | -             | -         | -            |
| Missouri.....           | 59                | 852        | 14     | 1                               | 42         | 40    | 3     | 92           | -             | -         | -            |
| North Dakota.....       | 11                | 249        | 6      | -                               | 2          | -     | 6     | 228          | -             | -         | -            |
| South Dakota.....       | 2                 | 76         | -      | -                               | -          | -     | 8     | 10           | -             | -         | -            |
| Nebraska.....           | 3                 | 885        | 113    | -                               | 2          | 9     | 8     | 335          | -             | -         | -            |
| Kansas.....             | -                 | 50         | 3      | -                               | 1          | 14    | -     | 85           | -             | -         | -            |
| SOUTH ATLANTIC.....     | 466               | 5,008      | 1,748  | 5                               | 270        | 296   | 267   | 5,440        | -             | -         | -            |
| Delaware.....           | 11                | 208        | 198    | -                               | 3          | 4     | 15    | 137          | -             | -         | -            |
| Maryland.....           | 73                | 1,046      | 30     | 2                               | 27         | 29    | 35    | 446          | -             | -         | -            |
| Dist. of Columbia....   | 5                 | 315        | -      | -                               | 1          | 8     | 10    | 143          | -             | -         | -            |
| Virginia.....           | 183               | 1,344      | 692    | -                               | 23         | 35    | 81    | 1,293        | -             | -         | -            |
| West Virginia.....      | 28                | 182        | 144    | -                               | 5          | 13    | 42    | 1,431        | -             | -         | -            |
| North Carolina.....     | 45                | 520        | 148    | -                               | 53         | 46    | NN    | NN           | -             | -         | -            |
| South Carolina.....     | 28                | 377        | 91     | 2                               | 29         | 42    | 8     | 534          | -             | -         | -            |
| Georgia.....            | 1                 | 5          | 1      | -                               | 28         | 51    | -     | -            | -             | -         | -            |
| Florida.....            | 92                | 1,011      | 444    | 1                               | 101        | 68    | 76    | 1,456        | -             | -         | -            |
| EAST SOUTH CENTRAL..... | 97                | 629        | 62     | 5                               | 95         | 88    | 112   | 3,126        | -             | -         | -            |
| Kentucky.....           | 24                | 339        | 29     | -                               | 34         | 25    | 47    | 1,212        | -             | -         | -            |
| Tennessee.....          | 68                | 217        | 15     | 4                               | 39         | 39    | 59    | 1,725        | -             | -         | -            |
| Alabama.....            | 1                 | 40         | 1      | 1                               | 18         | 14    | 5     | 169          | -             | -         | -            |
| Mississippi.....        | 4                 | 33         | 17     | -                               | 4          | 10    | 1     | 20           | -             | -         | -            |
| WEST SOUTH CENTRAL..... | 411               | 6,047      | 2,889  | 4                               | 180        | 236   | 310   | 5,316        | -             | -         | 1            |
| Arkansas.....           | 7                 | 27         | 16     | -                               | 15         | 25    | 2     | 78           | -             | -         | -            |
| Louisiana.....          | 8                 | 59         | 74     | 2                               | 46         | 66    | -     | 14           | -             | -         | -            |
| Oklahoma.....           | 65                | 305        | 109    | -                               | 11         | 23    | 189   | 1,996        | -             | -         | -            |
| Texas.....              | 331               | 5,656      | 2,690  | 2                               | 108        | 122   | 119   | 3,228        | -             | -         | 1            |
| MOUNTAIN.....           | 71                | 1,065      | 381    | -                               | 17         | 33    | 108   | 2,350        | -             | -         | -            |
| Montana.....            | -                 | 14         | 4      | -                               | -          | 4     | 31    | 450          | -             | -         | -            |
| Idaho.....              | 2                 | 19         | 38     | -                               | 3          | 6     | 4     | 74           | -             | -         | -            |
| Wyoming.....            | -                 | 8          | -      | -                               | 1          | -     | -     | 30           | -             | -         | -            |
| Colorado.....           | 5                 | 104        | 70     | -                               | 5          | 6     | 36    | 748          | -             | -         | -            |
| New Mexico.....         | 2                 | 129        | 152    | -                               | -          | 6     | 21    | 479          | -             | -         | -            |
| Arizona.....            | 54                | 757        | 114    | -                               | 6          | 8     | 10    | 469          | -             | -         | -            |
| Utah.....               | -                 | 19         | 2      | -                               | 2          | 1     | 6     | 100          | -             | -         | -            |
| Nevada.....             | 8                 | 15         | 1      | -                               | -          | 2     | -     | -            | -             | -         | -            |
| PACIFIC.....            | 137               | 1,339      | 696    | 7                               | 211        | 396   | 665   | 8,005        | -             | -         | -            |
| Washington.....         | 25                | 172        | 46     | 1                               | 32         | 50    | 356   | 3,379        | -             | -         | -            |
| Oregon.....             | 10                | 143        | 147    | -                               | 17         | 9     | 47    | 606          | -             | -         | -            |
| California.....         | 77                | 929        | 493    | 6                               | 161        | 319   | 166   | 3,130        | -             | -         | -            |
| Alaska.....             | 23                | 44         | 4      | -                               | -          | 10    | 13    | 303          | -             | -         | -            |
| Hawaii.....             | 2                 | 51         | 6      | -                               | 1          | 8     | 83    | 587          | -             | -         | -            |
| Puerto Rico.....        | 29                | 722        | 438    | -                               | 3          | 12    | 29    | 484          | -             | -         | -            |
| Virgin Islands.....     | -                 | 5          | 4      | -                               | -          | -     | -     | 1            | -             | -         | -            |

\*Delayed Reports: Measles: Mass. Delete 24  
Mumps: Maine 5

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
MAY 16, 1970 AND MAY 10, 1969 (19th WEEK) - CONTINUED

| AREA                   | RUBELLA |              | TETANUS |              | TULAREMIA |              | TYPHOID FEVER |              | TYPHUS FEVER<br>TICK-BORNE<br>(Rky. Mt. Spotted) |              | RABIES IN<br>ANIMALS |              |
|------------------------|---------|--------------|---------|--------------|-----------|--------------|---------------|--------------|--|--------------|----------------------|--------------|
|                        | 1970    | Cum.<br>1970 | 1970    | Cum.<br>1970 | 1970      | Cum.<br>1970 | 1970          | Cum.<br>1970 | 1970   | Cum.<br>1970 | 1970                 | Cum.<br>1970 |
| UNITED STATES.....     | 2,898   | 36,147       | —       | 31           | —         | 33           | 1             | 80           | 10   | 21           | 39                   | 1,229        |
| NEW ENGLAND.....       | 210     | 1,719        | —       | 3            | —         | —            | —             | 3            | —  | —            | 1                    | 47           |
| Maine.....             | 24      | 286          | —       | —            | —         | —            | —             | —            | —  | —            | 1                    | 11           |
| New Hampshire.....     | 16      | 130          | —       | —            | —         | —            | —             | —            | —  | —            | —                    | —            |
| Vermont.....           | —       | 31           | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 34           |
| Massachusetts.....     | 69      | 762          | —       | 2            | —         | —            | —             | 2            | —  | —            | —                    | —            |
| Rhode Island.....      | 57      | 101          | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 1            |
| Connecticut.....       | 44      | 409          | —       | 1            | —         | —            | —             | 1            | —  | —            | —                    | 1            |
| MIDDLE ATLANTIC.....   | 87      | 2,577        | —       | 3            | —         | —            | —             | 19           | —  | —            | 7                    | 110          |
| New York City.....     | 19      | 370          | —       | 1            | —         | —            | —             | 7            | —  | —            | —                    | —            |
| New York, Up-State..   | 31      | 261          | —       | —            | —         | —            | —             | 5            | —  | —            | 7                    | 105          |
| New Jersey.....        | 37      | 666          | —       | 1            | —         | —            | —             | 2            | —  | —            | —                    | —            |
| Pennsylvania.....      | —       | 1,280        | —       | 1            | —         | —            | —             | 5            | —  | —            | —                    | 5            |
| EAST NORTH CENTRAL.... | 551     | 7,572        | —       | 8            | —         | 15           | —             | 12           | —  | —            | 2                    | 81           |
| Ohio.....              | 162     | 1,486        | —       | —            | —         | 2            | —             | 5            | —  | —            | —                    | 27           |
| Indiana.....           | 59      | 1,471        | —       | 1            | —         | 12           | —             | 1            | —  | —            | —                    | 3            |
| Illinois.....          | 157     | 1,116        | —       | 3            | —         | 1            | —             | 1            | —  | —            | —                    | 24           |
| Michigan.....          | 112     | 1,887        | —       | 4            | —         | —            | —             | 5            | —  | —            | 2                    | 9            |
| Wisconsin.....         | 61      | 1,612        | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 18           |
| WEST NORTH CENTRAL.... | 243     | 2,805        | —       | 1            | —         | 4            | —             | 1            | —  | —            | 9                    | 176          |
| Minnesota.....         | 2       | 84           | —       | —            | —         | —            | —             | 1            | —  | —            | 1                    | 38           |
| Iowa.....              | 221     | 1,820        | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 29           |
| Missouri.....          | 15      | 269          | —       | —            | —         | 3            | —             | —            | —  | —            | 2                    | 40           |
| North Dakota.....      | —       | 98           | —       | —            | —         | 1            | —             | —            | —  | —            | 1                    | 18           |
| South Dakota.....      | —       | 1            | —       | 1            | —         | —            | —             | —            | —  | —            | —                    | 17           |
| Nebraska.....          | 5       | 492          | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 2            |
| Kansas.....            | —       | 41           | —       | —            | —         | —            | —             | —            | —  | —            | 5                    | 32           |
| SOUTH ATLANTIC.....    | 397     | 4,774        | —       | 8            | —         | 4            | —             | 11           | 9  | 14           | 7                    | 289          |
| Delaware.....          | —       | 35           | —       | —            | —         | —            | —             | —            | 2  | 2            | —                    | —            |
| Maryland.....          | 69      | 258          | —       | —            | —         | —            | —             | 3            | —  | —            | —                    | 1            |
| Dist. of Columbia...   | 2       | 15           | —       | 1            | —         | —            | —             | —            | —  | —            | —                    | —            |
| Virginia.....          | 43      | 561          | —       | —            | —         | —            | —             | 1            | 3  | 5            | 4                    | 140          |
| West Virginia*.....    | 40      | 960          | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 66           |
| North Carolina.....    | —       | 19           | —       | —            | —         | 3            | —             | 1            | 1  | 1            | —                    | 1            |
| South Carolina.....    | 79      | 500          | —       | —            | —         | —            | —             | —            | 3  | 6            | —                    | —            |
| Georgia.....           | —       | —            | —       | 1            | —         | —            | —             | 4            | —  | —            | —                    | 43           |
| Florida.....           | 164     | 2,426        | —       | 6            | —         | 1            | —             | 2            | —  | —            | 3                    | 38           |
| EAST SOUTH CENTRAL.... | 141     | 1,765        | —       | 1            | —         | 2            | —             | 4            | 1  | 2            | 4                    | 107          |
| Kentucky.....          | 43      | 607          | —       | —            | —         | 1            | —             | 1            | —  | —            | 3                    | 62           |
| Tennessee.....         | 82      | 892          | —       | —            | —         | 1            | —             | —            | —  | 1            | —                    | 29           |
| Alabama.....           | 13      | 217          | —       | 1            | —         | —            | —             | 3            | 1  | 1            | 1                    | 16           |
| Mississippi.....       | 3       | 49           | —       | —            | —         | —            | —             | —            | —  | —            | —                    | —            |
| WEST SOUTH CENTRAL.... | 463     | 6,759        | —       | 4            | —         | 7            | —             | 6            | —  | 3            | 6                    | 227          |
| Arkansas.....          | —       | 30           | —       | 3            | —         | 2            | —             | 3            | —  | 1            | —                    | 30           |
| Louisiana.....         | 33      | 125          | —       | 1            | —         | —            | —             | 1            | —  | —            | —                    | 40           |
| Oklahoma.....          | 47      | 718          | —       | —            | —         | 4            | —             | —            | —  | 2            | —                    | 45           |
| Texas.....             | 383     | 5,886        | —       | —            | —         | 1            | —             | 2            | —  | —            | 6                    | 112          |
| MOUNTAIN.....          | 104     | 1,402        | —       | —            | —         | 1            | —             | 6            | —  | 2            | 2                    | 50           |
| Montana.....           | 6       | 271          | —       | —            | —         | —            | —             | 1            | —  | —            | —                    | —            |
| Idaho.....             | 20      | 104          | —       | —            | —         | —            | —             | —            | —  | —            | —                    | —            |
| Wyoming.....           | —       | 131          | —       | —            | —         | —            | —             | —            | —  | —            | —                    | 30           |
| Colorado.....          | 23      | 243          | —       | —            | —         | —            | —             | 1            | —  | 1            | —                    | 9            |
| New Mexico.....        | 6       | 136          | —       | —            | —         | —            | —             | 3            | —  | —            | 1                    | 11           |
| Arizona.....           | 45      | 379          | —       | —            | —         | —            | —             | 1            | —  | —            | —                    | —            |
| Utah.....              | 4       | 138          | —       | —            | —         | 1            | —             | —            | —  | —            | —                    | —            |
| Nevada.....            | —       | —            | —       | —            | —         | —            | —             | —            | —  | —            | —                    | —            |
| PACIFIC.....           | 702     | 6,774        | —       | 3            | —         | —            | 1             | 18           | —  | —            | 1                    | 142          |
| Washington.....        | 455     | 3,490        | —       | —            | —         | —            | —             | 1            | —  | —            | —                    | —            |
| Oregon.....            | 35      | 460          | —       | 1            | —         | —            | —             | —            | —  | —            | —                    | 1            |
| California.....        | 202     | 2,595        | —       | 2            | —         | —            | 1             | 15           | —  | —            | 1                    | 141          |
| Alaska.....            | 2       | 76           | —       | —            | —         | —            | —             | 1            | —  | —            | —                    | —            |
| Hawaii.....            | 8       | 153          | —       | —            | —         | —            | —             | 1            | —  | —            | —                    | —            |
| Puerto Rico.....       | —       | 18           | —       | 4            | —         | —            | —             | 2            | —  | —            | —                    | —            |
| Virgin Islands.....    | —       | —            | —       | —            | —         | —            | —             | —            | —  | —            | —                    | —            |

\*Delayed Reports: Rubella: West Virginia 5

Typhoid: Arizona 1

Week No.  
19

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED MAY 16, 1970

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

| Area                       | All Causes |                   | Pneumonia and Influenza All Ages | Under 1 year All Causes | Area  | All Causes |                   | Pneumonia and Influenza All Ages | Under 1 year All Causes |
|----------------------------|------------|-------------------|----------------------------------|-------------------------|---|------------|-------------------|----------------------------------|-------------------------|
|                            | All Ages   | 65 years and over |                                  |                         |   | All Ages   | 65 years and over |                                  |                         |
| NEW ENGLAND:               | 737        | 442               | 50                               | 28                      | SOUTH ATLANTIC:   | 1,076      | 548               | 35                               | 54                      |
| Boston, Mass.-----         | 211        | 113               | 16                               | 7                       | Atlanta, Ga.-----   | 110        | 52                | 1                                | 7                       |
| Bridgeport, Conn.-----     | 50         | 26                | 3                                | 2                       | Baltimore, Md.-----   | 254        | 115               | 4                                | 15                      |
| Cambridge, Mass.-----      | 21         | 14                | 3                                | 2                       | Charlotte, N. C.-----   | 52         | 22                | —                                | 1                       |
| Fall River, Mass.-----     | 41         | 26                | —                                | 3                       | Jacksonville, Fla.-----   | 93         | 38                | 1                                | 5                       |
| Hartford, Conn.-----       | 71         | 42                | 3                                | 3                       | Miami, Fla.-----  | 130        | 73                | 1                                | 7                       |
| Lowell, Mass.-----         | 22         | 10                | —                                | —                       | Norfolk, Va.-----   | 55         | 32                | 5                                | 5                       |
| Lynn, Mass.-----           | 15         | 11                | —                                | —                       | Richmond, Va.-----  | 73         | 31                | 2                                | 4                       |
| New Bedford, Mass.-----    | 33         | 25                | 6                                | —                       | Savannah, Ga.-----  | 31         | 15                | 3                                | 1                       |
| New Haven, Conn.-----      | 52         | 28                | —                                | 5                       | St. Petersburg, Fla.-----   | 94         | 74                | 2                                | —                       |
| Providence, R. I.-----     | 71         | 45                | 4                                | 3                       | Tampa, Fla.-----  | 78         | 46                | 5                                | 3                       |
| Somerville, Mass.-----     | 14         | 8                 | 1                                | —                       | Washington, D. C.-----  | 62         | 26                | 8                                | 1                       |
| Springfield, Mass.-----    | 60         | 40                | 9                                | 1                       | Wilmington, Del.-----   | 44         | 24                | 3                                | 5                       |
| Waterbury, Conn.-----      | 27         | 17                | 1                                | 1                       |   |            |                   |                                  |                         |
| Worcester, Mass.-----      | 49         | 37                | 4                                | 1                       | EAST SOUTH CENTRAL:   | 635        | 336               | 36                               | 39                      |
| MIDDLE ATLANTIC:           | 3,229      | 1,957             | 114                              | 114                     | Birmingham, Ala.-----   | 107        | 57                | 2                                | 15                      |
| Albany, N. Y.-----         | 45         | 22                | 2                                | 2                       | Chattanooga, Tenn.-----   | 56         | 37                | 5                                | 1                       |
| Allentown, Pa.-----        | 40         | 26                | 2                                | 1                       | Knoxville, Tenn.-----   | 37         | 20                | 2                                | 3                       |
| Buffalo, N. Y.-----        | 174        | 102               | 2                                | 4                       | Louisville, Ky.-----  | 125        | 63                | 18                               | 4                       |
| Camden, N. J.-----         | 56         | 34                | 4                                | 6                       | Memphis, Tenn.-----   | 129        | 69                | 4                                | 7                       |
| Elizabeth, N. J.-----      | 27         | 18                | 1                                | 1                       | Mobile, Ala.-----   | 47         | 25                | —                                | —                       |
| Erie, Pa.-----             | 54         | 25                | 1                                | 3                       | Montgomery, Ala.-----   | 40         | 24                | 3                                | 1                       |
| Jersey City, N. J.-----    | 64         | 45                | 5                                | 3                       | Nashville, Tenn.-----   | 94         | 41                | 2                                | 8                       |
| Newark, N. J.-----         | 83         | 43                | 1                                | 4                       | WEST SOUTH CENTRAL:   | 1,183      | 586               | 37                               | 70                      |
| New York City, N. Y.*----- | 1,641      | 1,000             | 62                               | 53                      | Austin, Tex.-----   | 30         | 19                | 2                                | —                       |
| Paterson, N. J.-----       | 39         | 20                | 1                                | 3                       | Baton Rouge, La.-----   | 54         | 32                | 2                                | 3                       |
| Philadelphia, Pa.-----     | 367        | 196               | 5                                | 12                      | Corpus Christi, Tex.-----   | 38         | 20                | 1                                | 8                       |
| Pittsburgh, Pa.-----       | 166        | 105               | 5                                | 8                       | Dallas, Tex.-----   | 175        | 75                | 3                                | 9                       |
| Reading, Pa.-----          | 60         | 48                | 2                                | 1                       | El Paso, Tex.-----  | 54         | 28                | 2                                | 3                       |
| Rochester, N. Y.-----      | 135        | 89                | —                                | 6                       | Fort Worth, Tex.-----   | 78         | 40                | 3                                | 3                       |
| Schenectady, N. Y.-----    | 36         | 28                | 6                                | 1                       | Houston, Tex.-----  | 207        | 94                | 5                                | 10                      |
| Scranton, Pa.-----         | 38         | 25                | 3                                | —                       | Little Rock, Ark.-----  | 58         | 24                | 3                                | 10                      |
| Syracuse, N. Y.-----       | 83         | 52                | 1                                | 3                       | New Orleans, La.-----   | 157        | 70                | 4                                | 6                       |
| Trenton, N. J.-----        | 48         | 29                | 1                                | 1                       | Oklahoma City, Okla.-----   | 83         | 49                | 3                                | 5                       |
| Utica, N. Y.-----          | 36         | 26                | 6                                | 2                       | San Antonio, Tex.-----  | 106        | 51                | 2                                | 6                       |
| Yonkers, N. Y.-----        | 37         | 24                | 4                                | —                       | Shreveport, La.-----  | 70         | 37                | 3                                | 4                       |
| EAST NORTH CENTRAL:        | 2,663      | 1,463             | 63                               | 141                     | Tulsa, Okla.-----   | 73         | 47                | 4                                | 3                       |
| Akron, Ohio-----           | 80         | 47                | 1                                | 5                       | MOUNTAIN:   | 512        | 297               | 27                               | 24                      |
| Canton, Ohio-----          | 37         | 19                | 3                                | 3                       | Albuquerque, N. Mex.-----   | 49         | 22                | 6                                | 8                       |
| Chicago, Ill.-----         | 707        | 373               | 11                               | 44                      | Colorado Springs, Colo.-----  | 37         | 21                | 7                                | 4                       |
| Cincinnati, Ohio-----      | 140        | 82                | 1                                | 6                       | Denver, Colo.-----  | 141        | 87                | 5                                | 4                       |
| Cleveland, Ohio-----       | 205        | 114               | 5                                | 11                      | Ogden, Utah-----  | 14         | 9                 | —                                | 1                       |
| Columbus, Ohio-----        | 138        | 76                | —                                | 9                       | Phoenix, Ariz.-----   | 129        | 75                | 1                                | 1                       |
| Dayton, Ohio-----          | 67         | 37                | 1                                | 7                       | Pueblo, Colo.-----  | 22         | 15                | 1                                | 1                       |
| Detroit, Mich.-----        | 383        | 204               | 6                                | 11                      | Salt Lake City, Utah-----   | 48         | 33                | 2                                | 3                       |
| Evansville, Ind.-----      | 54         | 33                | 4                                | —                       | Tucson, Ariz.-----  | 72         | 35                | 5                                | 2                       |
| Flint, Mich.-----          | 54         | 26                | 2                                | 6                       | PACIFIC:  | 1,630      | 970               | 41                               | 65                      |
| Fort Wayne, Ind.-----      | 59         | 32                | 2                                | 5                       | Berkeley, Calif.-----   | 30         | 22                | —                                | —                       |
| Gary, Ind.-----            | 41         | 19                | 3                                | 2                       | Fresno, Calif.-----   | 46         | 26                | 1                                | 3                       |
| Grand Rapids, Mich.-----   | 67         | 40                | 7                                | 5                       | Glendale, Calif.-----   | 22         | 17                | —                                | —                       |
| Indianapolis, Ind.-----    | 161        | 66                | 4                                | 8                       | Honolulu, Hawaii-----   | 43         | 22                | —                                | 3                       |
| Madison, Wis.-----         | 34         | 16                | 3                                | 1                       | Long Beach, Calif.-----   | 99         | 57                | 1                                | 2                       |
| Milwaukee, Wis.-----       | 130        | 87                | —                                | 7                       | Los Angeles, Calif.-----  | 496        | 296               | 13                               | 20                      |
| Peoria, Ill.-----          | 31         | 14                | —                                | 1                       | Oakland, Calif.-----  | 74         | 42                | 2                                | 6                       |
| Rockford, Ill.-----        | 49         | 29                | 3                                | 5                       | Pasadena, Calif.-----   | 39         | 29                | 1                                | —                       |
| South Bend, Ind.-----      | 45         | 34                | 3                                | 1                       | Portland, Oreg.-----  | 130        | 85                | 2                                | 7                       |
| Toledo, Ohio-----          | 115        | 68                | 3                                | 3                       | Sacramento, Calif.-----   | 77         | 46                | 1                                | 3                       |
| Youngstown, Ohio-----      | 66         | 47                | 1                                | 1                       | San Diego, Calif.-----  | 108        | 70                | —                                | 1                       |
| WEST NORTH CENTRAL:        | 824        | 531               | 22                               | 55                      | San Francisco, Calif.-----  | 191        | 101               | 10                               | 9                       |
| Des Moines, Iowa-----      | 63         | 44                | 1                                | 3                       | San Jose, Calif.-----   | 34         | 24                | 2                                | —                       |
| Duluth, Minn.-----         | 28         | 20                | —                                | —                       | Seattle, Wash.-----   | 135        | 70                | 4                                | 8                       |
| Kansas City, Kans.-----    | 42         | 19                | 3                                | 7                       | Spokane, Wash.-----   | 57         | 36                | 3                                | 2                       |
| Kansas City, Mo.-----      | 130        | 81                | 1                                | 9                       | Tacoma, Wash.-----  | 49         | 27                | 1                                | 1                       |
| Lincoln, Nebr.-----        | 34         | 23                | —                                | 1                       | Total   | 12,489     | 7,130             | 425                              | 590                     |
| Minneapolis, Minn.-----    | 132        | 91                | 5                                | 9                       | Expected Number   | 12,526     | 7,281             | 401                              | 482                     |
| Omaha, Nebr.-----          | 84         | 59                | 3                                | 2                       | Cumulative Total<br>(includes reported corrections<br>for previous weeks) | 259,142    | 149,376           | 11,656                           | 11,724                  |
| St. Louis, Mo.-----        | 202        | 125               | 3                                | 15                      |   |            |                   |                                  |                         |
| St. Paul, Minn.-----       | 63         | 38                | 1                                | 8                       |   |            |                   |                                  |                         |
| Wichita, Kans.-----        | 46         | 31                | 5                                | 1                       |   |            |                   |                                  |                         |
| Las Vegas, Nev.*-----      | 27         | 11                | 3                                | 2                       |   |            |                   |                                  |                         |

\*Mortality data are being collected from Las Vegas, Nev., for possible inclusion in this table, however, for statistical reasons, these data will be listed only and not included in the total, expected number, or cumulative total, until 5 years of data are collected.

†Delayed report for week ended May 9, 1970.

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ATTN: THE EDITOR  
MORBIDITY AND MORTALITY WEEKLY REPORT  
ATLANTA, GEORGIA 30333

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCDC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES AT CLOSE OF BUSINESS ON FRIDAY; COMPILED DATA ON A NATIONAL BASIS ARE OFFICIALLY RELEASED TO THE PUBLIC ON THE SUCCEEDING FRIDAY.

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